

AMENDMENTS TO THE CLAIMS

1-21. (Canceled)

22. (Currently Amended) A method comprising:

receiving a photoelectrically induced signal in an array of photoreceptors on a semiconductor substrate;

controlling each photoreceptor in the array of photoreceptors to simultaneously initiate a common integration period;

at the end of each integration period, controlling each photoreceptor in the array of photoreceptors to transfer its photoelectrically induced signal to a respective storage node located within a respective semiconductor well region formed in the semiconductor substrate; and

preventing each storage node from integrating charge,

wherein each storage node is doped to a first conductivity type, and

wherein a portion of each semiconductor well surrounding each storage node is doped to a second conductivity type.

23. (Canceled)

24. (Currently Amended) The method of A-method as in claim 22, wherein said preventing comprises shielding each storage node with a light shield overlying at least said respective storage node.

25. (Currently Amended) The method of A-method as in claim 22, wherein said preventing comprises shielding each semiconductor well with a light shield overlying said respective semiconductor well.

26. (Canceled)

27. (Currently Amended) The method of A-method as in claim 25, further comprising enabling a first reset operation which resets a value of each storage node, and enabling a second reset operation, which resets a value of each photoreceptor.

28. (Currently Amended) The method of A-method as in claim 27, wherein said first and second reset operations each comprises activating a gate within each semiconductor well.

29. (Currently Amended) The method of A method as in claim 28, wherein each photoelectrically induced signal is a signal indicative of charge produced by a respective photoreceptor during said integration period.

30. (Currently Amended) The method of A method as in claim 28, wherein each photoreceptor includes a photodiode.

31. (Currently Amended) The method of A method as in claim 28, wherein each photoreceptor includes a photogate.

32. (Currently Amended) The method of A method as in claim 25, further comprising preventing each photoreceptor from acquiring a photoelectrically induced signal which is greater than a pre-determined amount.

33. (Currently Amended) The method of A method as in claim 25, wherein each of the plurality of photoreceptors in the array comprises a second semiconductor well further comprising forming second semiconductor wells for each of the plurality of photoreceptors in the array.

34-58. (Canceled)

59. (Previously Presented) The method of claim 22, further comprising resetting each storage node with a reset transistor provided within each semiconductor well.

60. (Previously Presented) The method of claim 22, further comprising transferring charge from each photoreceptor to each storage node with a transfer gate provided within each semiconductor well region.

61. (Previously Presented) The method of claim 22, further comprising isolating each storage node with a bridge diffusion node located within each semiconductor well region.

62. (Previously Presented) The method of claim 33, further comprising removing charge from each photoreceptor with an anti blooming gate located within each second semiconductor well.

63. (Previously Presented) The method of claim 33, further comprising resetting each photoreceptor with reset gates located within each second semiconductor wells.